



# HOFFER & ASSOCIATES

## CONSULTING HYDROGEOLOGISTS

OK - (mw)  
5/29/96 - left  
message w/ Jeff Hoffer  
approving recommendation  
RR 4, Box 2286  
Montpelier, VT 05602  
(802) 229 - 1113  
fax: 229 - 2780

May 14, 1996

Matthew Moran, Site Project Manager  
Sites Management Section  
VT DEC - Waste Management Division  
103 South Main Street/West Building  
Waterbury, VT 05671-0404

Re: Groundwater Monitoring Results, J&A Auto Repair, Bakersfield, Vermont  
SMS Site #94-1728

Dear Matt:

This letter presents the results of a groundwater monitoring event at J&A Auto Repair in Bakersfield, Vermont. As you requested in your letter dated December 14, 1996, we are monitoring the site on a semi-annual basis. This report summarizes the first sampling event for 1996. The monitoring results and other site data are presented in the following enclosures:

- Table 1 - Groundwater elevation measurements
- Table 2 - Groundwater sampling results for May 1, 1996
- Table 3 - Groundwater analytical data by well
- Figure 1 - Site location map
- Figure 2 - Site map
- Figure 3 - Groundwater fluctuations
- Figure 4 - Water-table map, May 1, 1996
- Figure 5 - Isoconcentration contour map for MTBE, May 1, 1996
- Groundwater Sampling Data Sheet
- Chain-Of-Custody
- Scitest Laboratory Services Analytical Report

Groundwater samples were collected on May 1, 1996. Prior to sampling, water levels and total well depths were measured in each well. MW-102, MW-103, and MW-104 were dry. The remaining wells were purged of approximately three well volumes prior to collecting samples. Purging and sample collection was conducted with dedicated polyethylene bailers. The samples were transferred from the bailers to two 40 mL vials, containing hydrochloric acid for sample preservation. Immediately after collection, samples were placed in a cooler with ice. Quality assurance/quality control (QA/QC) samples included a trip blank, a field blank, and a blind duplicate sample. The trip blank consisted of two sealed 40 mL vials filled with deionized water, which were prepared by the laboratory. The trip blank was handled in a similar manner as the samples, and was returned to the laboratory for analysis with the samples. A field blank was collected at the conclusion of the sampling event by pouring deionized water into two

**GROUNDWATER & ENVIRONMENTAL SERVICES**

sample vials. The blind duplicate was collected by filling four sample vials from MW-109. Two of these vials were submitted to the laboratory as the blind duplicate, designated sample "MW-D" on the groundwater sampling data sheet and the chain-of-custody. A laboratory chain-of-custody (a copy of which is included) was used to document the sampling event and accompany the samples to the laboratory. The samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl-tert-butyl-ether (MTBE) using EPA Method 8020 by Scitest Laboratory Services of Randolph, Vermont.

Groundwater elevation fluctuations at the site are shown on Figure 3, which illustrates that the May 1 water levels were at a historical maximum for the site. Markedly higher water levels were observed in MW-101 and MW-107, and are believed to represent perched water zones in the vicinity of these wells. The water levels in the remaining wells are in the 30 to 35 foot depth range, and depict a southeastward flow direction (see Figure 4). The anomalous water levels in MW-101 and MW-107 were not included in the contouring.

As shown on Table 2, the only contaminant detected during this sampling round was MTBE. This compound was detected in four wells, at concentrations ranging from 19 ug/L in MW-110 to 3 ug/L in MW-105. Figure 5 presents an isoconcentration contour map for MTBE, which illustrates a plume of dissolved-phase contamination downgradient from the former tank locations.

Relative to historical data, the May 1 groundwater sampling results show that BTEX contamination has decreased significantly. BTEX concentrations had been in the 50 to 150 ug/L range in MW-109 (September 1995), but have decreased to below detection limits for all wells. The May 1 data for MTBE show a greater distribution of this compound than previous results, however, the concentrations are all below regulatory standards.

Based on these results, we recommend that the next sampling event occur in late Summer or early Fall. If contaminant concentrations remain at or below the concentrations measured during this round, we will recommend changing the monitoring frequency to annually, or pursue site closure if possible.

If you have any questions or comments, please do not hesitate to call.

Sincerely,  
HOFFER & ASSOCIATES



Jefferson P. Hoffer, P.G.  
Principal Hydrogeologist

cc: Carl Ruprecht, S.B. Collins

**TABLE 1**  
Groundwater elevation measurements,  
J & A Auto Repair, Bakersfield, Vermont, SMS Site #94-1728.

**DEPTH TO WATER MEASUREMENTS**  
(feet below TOC)

WELL ID	Elev. of TOC (feet)	4/17/95	4/20/95	8/31/95	9/6/95	10/13/95	5/1/96
MW-101	97.80	18.50	18.84	dry	dry	dry	12.48
MW-102	96.69	dry	dry	dry	dry	dry	dry
MW-103	96.64	dry	dry	dry	dry	dry	dry
MW-104	97.65	dry	dry	dry	dry	dry	dry
MW-105	96.46	33.46	34.14	36.26	36.29	36.50	31.85
MW-106	96.85	35.36	35.14	37.77	37.89	38.12	35.58
MW-107	96.94	29.32	29.14	dry	dry	dry	26.51
MW-108	97.70				dry	dry	34.16
MW-109	97.54				36.62	36.82	31.84
MW-110	96.83				37.42	37.63	32.94

**GROUNDWATER ELEVATIONS (feet)**

WELL ID	Elev. Ground Surface (feet)	4/17/95	4/20/95	8/31/95	9/6/95	10/13/95	5/1/96
MW-101	98.13	79.30	78.96	dry	dry	dry	85.32
MW-102	97.03	dry	dry	dry	dry	dry	dry
MW-103	97.12	dry	dry	dry	dry	dry	dry
MW-104	98.12	dry	dry	dry	dry	dry	dry
MW-105	97.03	63.00	62.32	60.20	60.17	59.96	64.61
MW-106	97.29	61.49	61.71	59.08	58.96	58.73	61.27
MW-107	97.18	67.62	67.80	dry	dry	dry	70.43
MW-108					dry	dry	63.54
MW-109					60.92	60.72	65.70
MW-110					59.41	59.20	63.89

Notes:

TOC = top of casing (pvc)

Elevations are relative to an on-site benchmark of 100.00 feet

**TABLE 2**  
Groundwater sampling results for May 1, 1996,  
J & A Auto, Bakersfield, Vermont, SMS Site # 94-1728.  
(results in ug/L)

WELL ID	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-101	<1	<1	<1	<1	<1
MW-105	<1	<1	<1	<1	3
MW-106	<1	<1	<1	<1	<1
MW-107	<1	<1	<1	<1	<1
MW-108	<1	<1	<1	<1	8
MW-109	<1	<1	<1	<1	9 / 9
MW-110	<1	<1	<1	<1	19
Trip Blank	<1	<1	<1	<1	<1
Field Blank	<1	1	<1	<1	<1

Notes:

<1 = below a detection level of 1

<1 / <1 = sample result / field duplicate result

**TABLE 3**  
Groundwater analytical data by well,  
J & A Auto, Bakersfield, Vermont, SMS Site #94-1728.  
(results in ug/L)

**MW-101**

Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
5/1/96	<1	<1	<1	<1	<1

**MW - 105**

Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
4/20/95	<1	<1	<1	<1	<1
5/1/96	<1	<1	<1	<1	3

**MW - 106**

Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
4/20/95	<1	<1	<1	<1	<1
5/1/96	<1	<1	<1	<1	<1

**MW - 107**

Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
4/20/95	<1	<1	<1	<1	<1
5/1/96	<1	<1	<1	<1	<1

**MW-108**

Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
5/1/96	<1	<1	<1	<1	8

**MW - 109**

Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
9/6/95	30	151	43	162	15
5/1/96	<1	<1	<1	<1	9

**MW - 110**

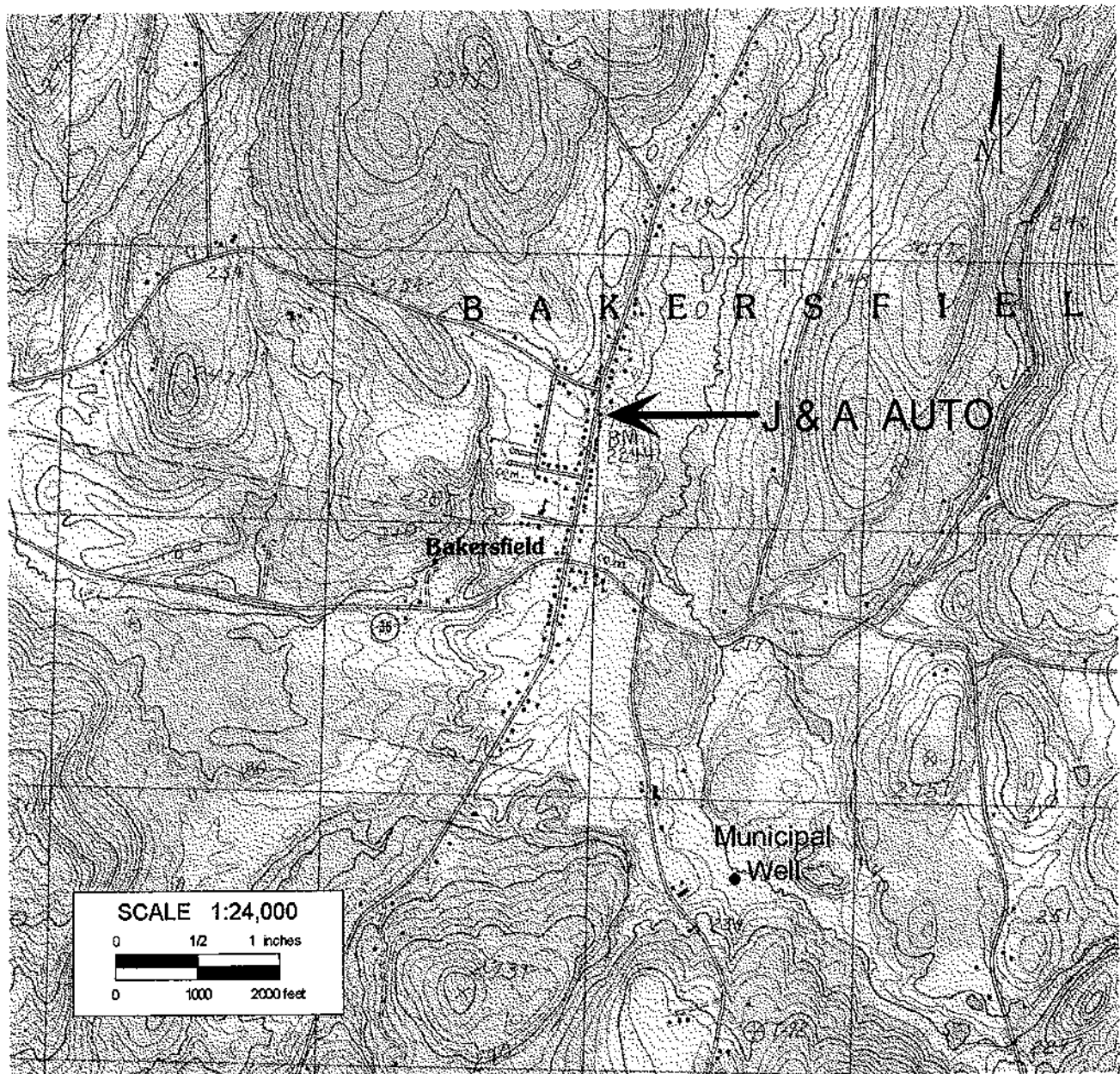
Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
9/6/95	<1	1	<1	<1	2
5/1/96	<1	<1	<1	<1	19

**QA / QC**

Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
<b>4/20/95</b>					
Duplicate (MW-107)	<1 / <1	<1 / <1	<1 / <1	<1 / <1	<1 / <1
Trip Blank	<1	<1	<1	<1	<1
Field Blank	<1	<1	<1	<1	<1
<b>9/6/95</b>					
Duplicate (MW-109)	30 / 29	151 / 149	43 / 42	162 / 160	15 / 14
Trip Blank	<1	<1	<1	<1	<1
Field Blank	<1	<1	<1	<1	<1
<b>5/1/96</b>					
Duplicate (MW-109)	<1	<1	<1	<1	9 / 9
Trip Blank	<1	<1	<1	<1	<1
Field Blank	<1	1	<1	<1	<1

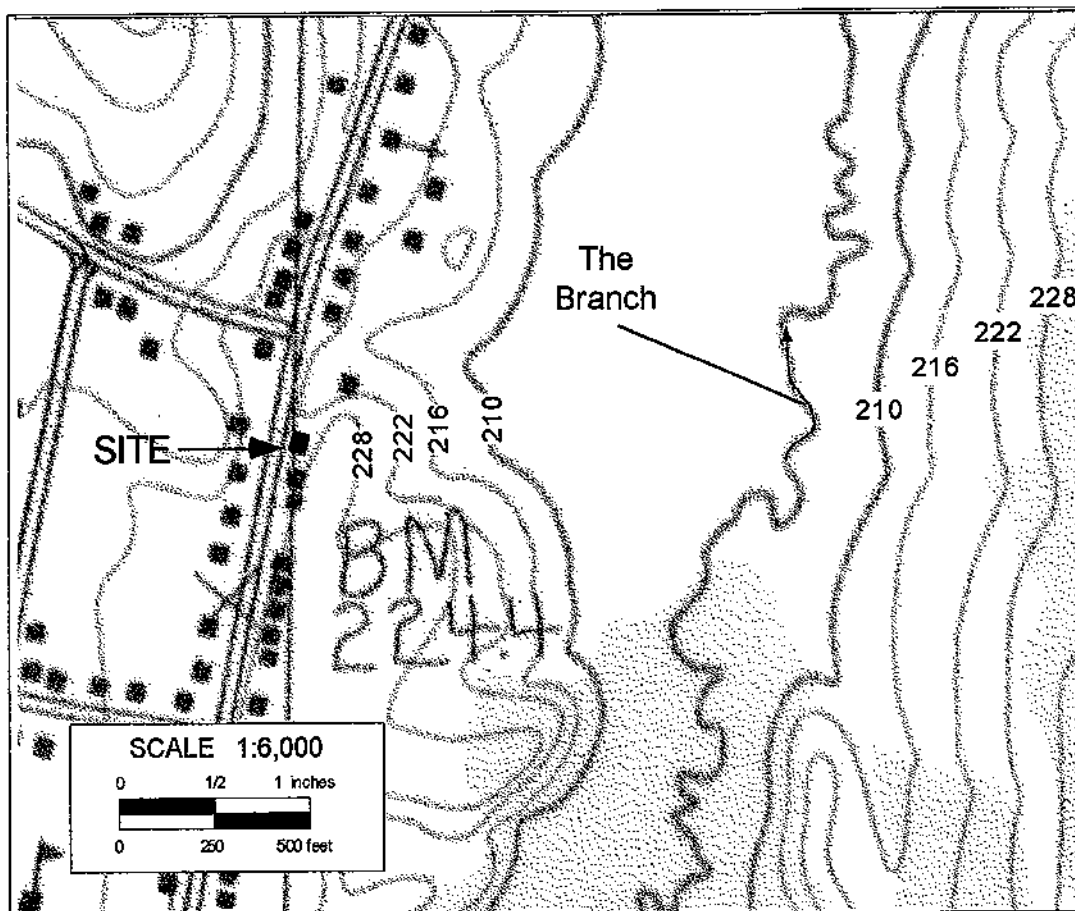
Notes:

<1 = Less than a detection limit of 1  
<1 / <1 = Sample result / field duplicate result



Base from U.S. Geological Survey, 1:24,000;  
Bakersfield, Vermont, 1986, Provisional Edition  
contours and elevations in meters

**FIGURE 1**  
Site location map, J&A Auto, Bakersfield, Vermont,  
SMS Site #94-1728.



Enlarged from U.S. Geological Survey, 1:24,000;  
Bakersfield, Vermont, 1986, Provisional Edition  
contours and elevations in meters

**FIGURE 2**  
Site vicinity map, J&A Auto, Bakersfield, Vermont,  
SMS Site #94-1728.

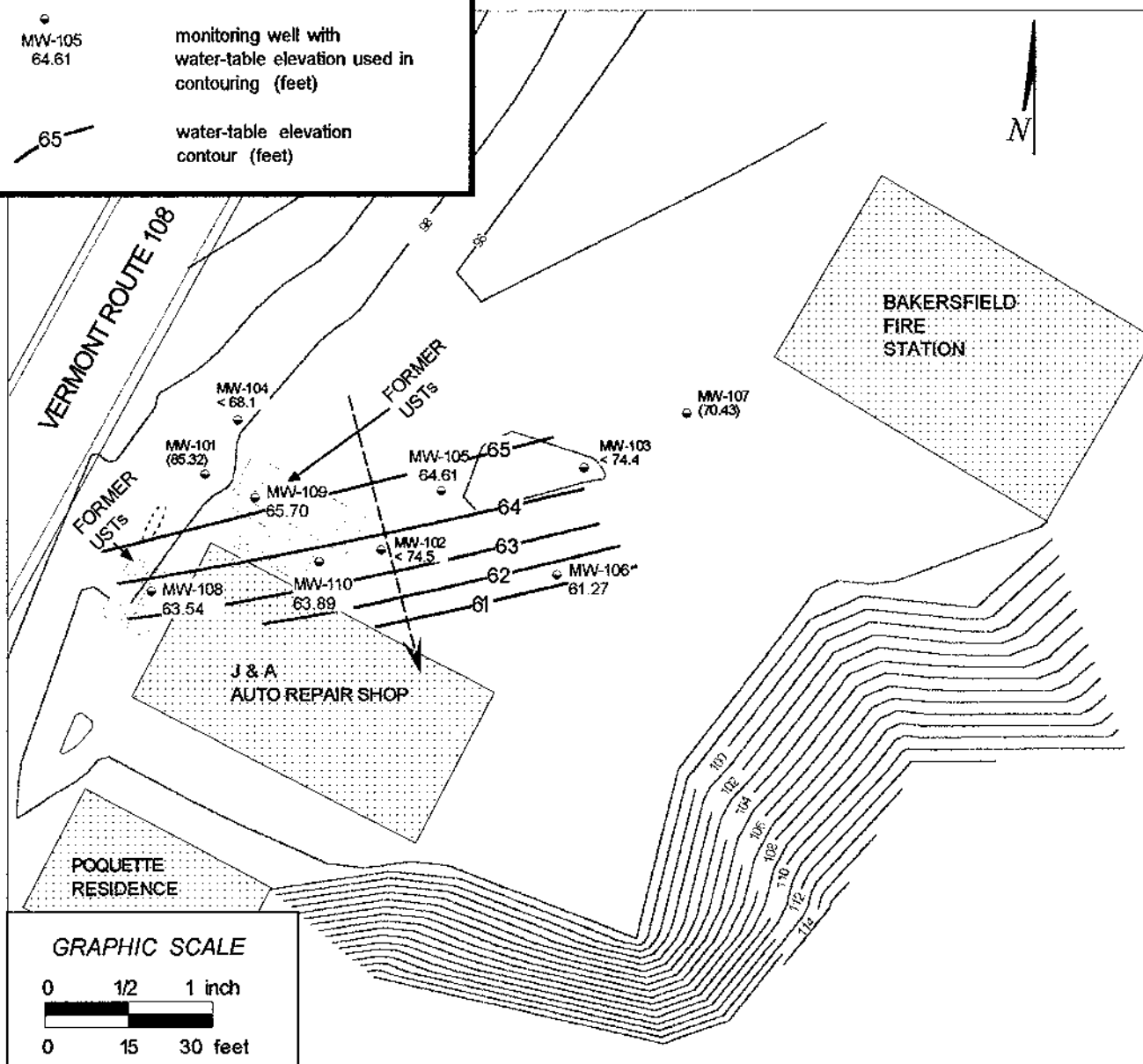




# EXPLANATION

MW-105  
64.61  
monitoring well with  
water-table elevation used in  
contouring (feet)

65  
water-table elevation  
contour (feet)



Elevations in feet, relative to on-site benchmark of 100.00 feet  
 MW-101 and MW-107 water levels not used in contouring

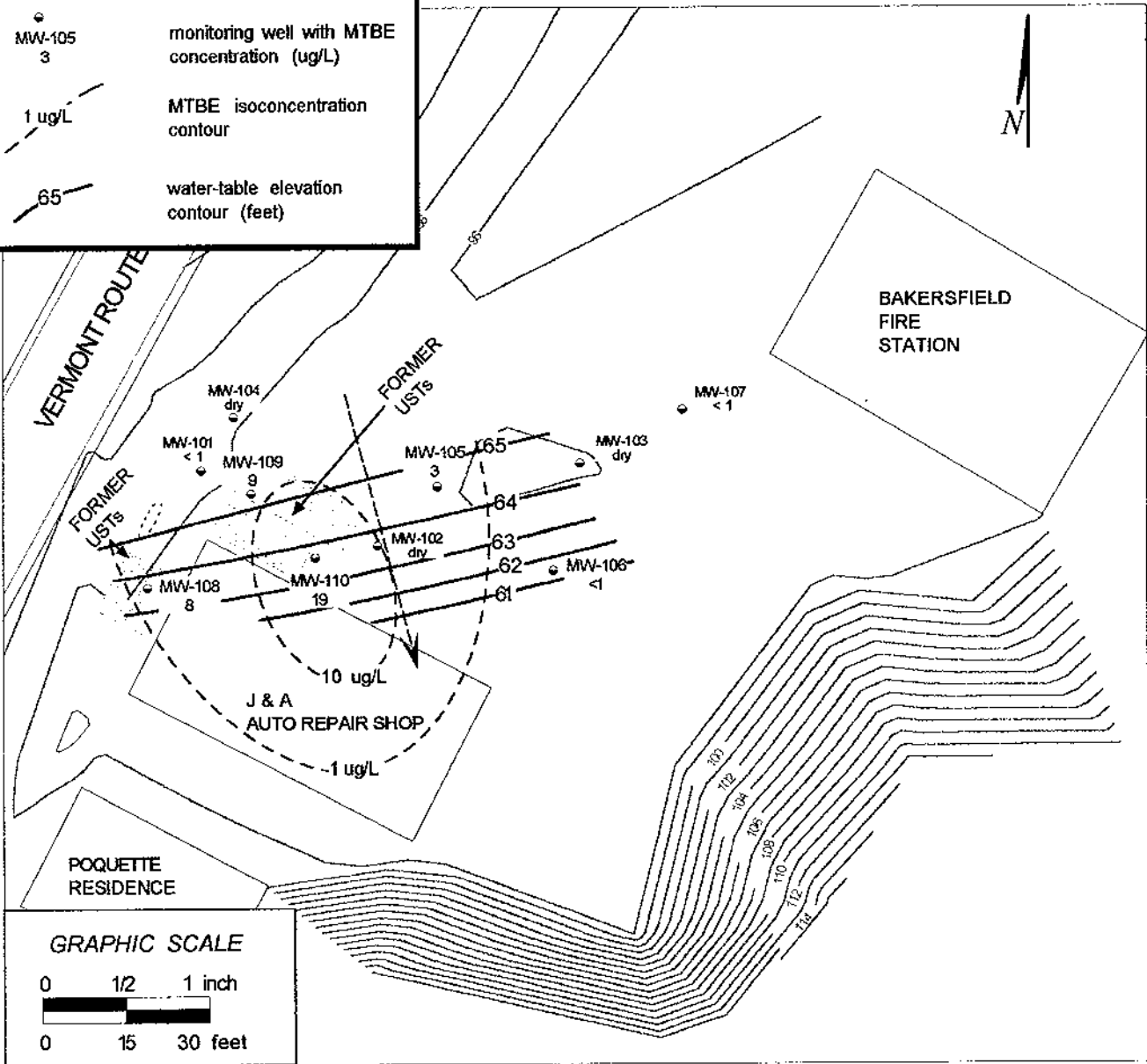
MW-106  
 site monitoring well

95  
 surface elevation contour (feet)

**FIGURE 4**  
 Water-table map, May 1, 1996,  
 J&A Auto, Bakersfield, Vermont,  
 SMS Site #94-1728.

# EXPLANATION

- MW-105  
3 monitoring well with MTBE concentration (ug/L)
- 1 ug/L MTBE isoconcentration contour
- 65 water-table elevation contour (feet)



Elevations in feet, relative to on-site benchmark of 100.00 feet

MW-106 site monitoring well

98 surface elevation contour (feet)

**FIGURE 5**  
Isoconcentration contour map for MTBE, May 1, 1996,  
J&A Auto, Bakersfield, Vermont,  
SMS Site #94-1728.

# GROUNDWATER SAMPLING DATA SHEET

LOCATION: J+A AUTO REPAIR  
 DATE: MAY 1, 1996

SAMPLE METHOD: 2" Poly BAILERS  
 SAMPLING TEAM: TF SCHMALE

Page 1 of 1

WELL ID	PID Head Space (ppm)	Depth to Water (ft)	Total Well Depth (ft)	Water Column (ft)	3 Well Volumes* (gals)	Total Purged (gals)	Sample Time	Sample Type	Chain-of-Custody Number	Time	Remarks
TB-01	NA						0900	TB	TB-01	0900	TRIP BLANK
MW-101		12.48	18.90	6.42	3.08	3.25	0940	S	MW-101	0940	LIGHT BROWN, S. TURBID
MW-102		DRY	22.17	DRY TO	22.14'			S			
MW-103		DRY	22.26	DRY TO	22.28'			S			
MW-104		DRY	29.70	DRY TO	29.70'			S			
MW-105		31.85	39.29	7.44	3.57	3.50	1015	S	MW-105	1015	LT. BRN., S. TURBID
MW-106		33.58	44.80	11.22	5.39	5.0	1030	S	MW-106	1030	LT. BRN., " "
MW-107		26.51	34.28	7.78	3.73	3.0	1055	S	MW-107	1055	" "
MW-108		34.16	32.88	3.72	1.79	1.80	0955	S	MW-108 0955	0955	LT. BROWN, S. TURBID
MW-109		31.84	44.0	12.16	5.84	5.6	1130	S	MW-109	1130	CLEAR - GRAY
MW-109		↓	44.0	↓	↓	↓	↓	DP	MW-D	1140	DUPLICATE SAMPLE
MW-110		32.94	45.0	12.06	5.79	5.0	1110	S	MW-110	1110	LT. BROWN, TURBID
FB-01	✓							FB	FB-01	1145	FIELD BLANK

NEW  
BAILER

\* (1.5" = 0.092 gals/ft, 2" = 0.16 gals/ft, 4" = 0.65 gals/ft, 6" = 1.5 gals/ft)

REMARKS

**Scitest, Inc.**

P.O. Box 339

Route 66 Professional Center, Randolph, VT 05060

Phone: (802)728-6313 Fax: (802)728-6044

Client: Jefferson P. Hoffer & Associates Address: RR 4 Box 2286, Cornstock Road  
Contact: Tim Schmalz Montpelier, VT 05602

Project # 70249

Phone No:

Requested by: KED

Bill to: Carl Ruprecht

S.B. Collins, Inc

54 Lower Welden St.

St. Albans, VT 05478

cc results to: Hoffer &amp; Assocs.

Project Name: J&amp;A Auto

Date requested: 03/26/96

Date shipped: Tim Will Pick Up

Date scheduled:

CHAIN OF CUSTODY RECORD			DATE	TIME
Sampled By:	<i>Tim Schmalz</i>	<i>5/1/96</i>	Relinquished By:	<i>Tim Schmalz</i>
Accepted By:			Relinquished By:	
Accepted By:			Received by Scitest:	<i>Kathleen Dugan</i>

Item Nos	Client ID or Description	Sampling Date	Sampling Time	Matrix	Preservative or Label	Bottle Type Plastic/Glass	Container Volume	Bottles per Sample	Parameters and Expiration Time >7days
①	MW-101	5/1/96	0940	GW	HCl	Glass	40 mL	2	EPA 8020
②	MW-108	*	0955	GW	HCl	Glass	40 mL	2	EPA 8020
③	MW-105	*	1015	GW	HCl	Glass	40 mL	2	EPA 8020
④	MW-106	*	1030	GW	HCl	Glass	40 mL	2	EPA 8020
⑤	MW-107	*	1055	GW	HCl	Glass	40 mL	2	EPA 8020
⑥	MW-110	*	1110	GW	HCl	Glass	40 mL	2	EPA 8020
⑦	MW-109	*	1130	GW	HCl	Glass	40 mL	2	EPA 8020
⑧	MW-D	*	1140	GW	HCl	Glass	40 mL	2	EPA 8020
⑨	FS-01	*	1145	GW	HCl	Glass	40 mL	2	EPA 8020
⑩		*	*	GW	HCl	Glass	40 mL	2	EPA 8020
⑪		*	*	GW	HCl	Glass	40 mL	2	EPA 8020
⑫	Trip Blank	*	*	GW	HCl	Glass	40 mL	2	EPA 8020

w/requests

Report Reviewed By:

Date:

Preserve Check:

*Cool*

Project Nos

*70249*

LABORATORY NUMBER:

*9605-01374*

LOGIN:

*KDugan**90048*



**SCITEST**  
LABORATORY SERVICES

ANALYTICAL REPORT

P.O. Box 339  
Randolph, Vermont 05060-0339  
(802) 728-6343

SB Collins, Inc.  
54 Lower Welden Street  
St. Albans, VT 05478

Carl Ruprecht

Work Order No.: 9605-01374

Project Name: J & A Auto  
Customer Nos.: 090048

Date Received: 5/02/96  
Date Reported: 5/06/96

Sample Desc.: Hoffer-MW 101

Sample Date: 5/01/96

Collection Time: 9:40

Test Performed	Method	Results	Units	Analyst	Analysis Date
Aromatic Volatile Organics	EPA 8020			JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020	BPQL	ug/L	JPM	5/03/96
Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020	BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Surrogate: 8020				JPM	5/03/96
***Bromofluorobenzene-8020		106	% Recovery	JPM	5/03/96

Sample Desc.: Hoffer-MW 108

Sample Date: 5/01/96

Collection Time: 9:55

Test Performed	Method	Results	Units	Analyst	Analysis Date
Aromatic Volatile Organics	EPA 8020			JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020	8	ug/L	JPM	5/03/96
Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020	BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Surrogate: 8020				JPM	5/03/96
***Bromofluorobenzene-8020		106	% Recovery	JPM	5/03/96

## ANALYTICAL REPORT

Project Name: J & A Auto  
Project No.: 090048

Work Order No.: 9605-01374

Sample Desc.: Hoffer-MW 105		Collection Time: 10:15			
Sample Date: 5/01/96		Results	Units	Analyst	Analysis Date
Test Performed	Method				
Aromatic Volatile Organics	EPA 8020			JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020	3	ug/L	JPM	5/03/96
Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020	BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Surrogate: 8020				JPM	5/03/96
***Bromofluorobenzene-8020		107	% Recovery	JPM	5/03/96

Sample Desc.: Hoffer-MW 106		Collection Time: 10:30			
Sample Date: 5/01/96		Results	Units	Analyst	Analysis Date
Test Performed	Method				
Aromatic Volatile Organics	EPA 8020			JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020	BPQL	ug/L	JPM	5/03/96
Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020	BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Surrogate: 8020				JPM	5/03/96
***Bromofluorobenzene-8020		106	% Recovery	JPM	5/03/96

Sample Desc.: Hoffer-MW 107		Collection Time: 10:55			
Sample Date: 5/01/96		Results	Units	Analyst	Analysis Date
Test Performed	Method				
Aromatic Volatile Organics	EPA 8020			JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020	BPQL	ug/L	JPM	5/03/96
Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96

## ANALYTICAL REPORT

Project Name: J & A Auto  
Project No.: 090048

Work Order No.: 9605-01374

Sample Desc.: Hoffer-MW 107		Collection Time: 10:55			
Sample Date: 5/01/96		Results	Units	Analyst	Analysis Date
Test Performed	Method				
Toluene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020	BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Surrogate: 8020				JPM	5/03/96
***Bromofluorobenzene-8020		107	% Recovery	JPM	5/03/96

Sample Desc.: Hoffer-MW 110		Collection Time: 11:10			
Sample Date: 5/01/96		Results	Units	Analyst	Analysis Date
Test Performed	Method				
Aromatic Volatile Organics	EPA 8020			JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020	19	ug/L	JPM	5/03/96
Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020	BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Surrogate: 8020				JPM	5/03/96
***Bromofluorobenzene-8020		107	% Recovery	JPM	5/03/96

Sample Desc.: Hoffer-MW 109		Collection Time: 11:30			
Sample Date: 5/01/96		Results	Units	Analyst	Analysis Date
Test Performed	Method				
Aromatic Volatile Organics	EPA 8020			JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020	9	ug/L	JPM	5/03/96
Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020	BPQL	ug/L	JPM	5/03/96

## ANALYTICAL REPORT

Project Name: J & A Auto  
Project No.: 090048

Work Order No.: 9605-01374

Sample Desc.: Hoffer-MW 109	Method	Collection Time: 11:30	Results	Units	Analyst	Analysis Date
Sample Date: 5/01/96						
Test Performed						
Chlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
Surrogate: 8020					JPM	5/03/96
***Bromofluorobenzene-8020			106	% Recovery	JPM	5/03/96

Sample Desc.: Hoffer-MW D	Method	Collection Time: 11:40	Results	Units	Analyst	Analysis Date
Sample Date: 5/01/96						
Test Performed						
Aromatic Volatile Organics	EPA 8020				JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020		9	ug/L	JPM	5/03/96
Benzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020		BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020		BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
Surrogate: 8020					JPM	5/03/96
***Bromofluorobenzene-8020			107	% Recovery	JPM	5/03/96

Sample Desc.: Hoffer-FB 01	Method	Collection Time: 11:45	Results	Units	Analyst	Analysis Date
Sample Date: 5/01/96						
Test Performed						
Aromatic Volatile Organics	EPA 8020				JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020		BPQL	ug/L	JPM	5/03/96
Benzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020		1	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020		BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020		BPQL	ug/L	JPM	5/03/96



## ANALYTICAL REPORT

Project Name: J & A Auto  
Project No.: 090048

Work Order No.: 9605-01374

Sample Desc.: Hoffer-FB 01		Collection Time: 11:45		Analyst	Analysis Date
Sample Date: 5/01/96	Method	Results	Units		
Test Performed					
1,4-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Surrogate: 8020				JPM	5/03/96
***Bromofluorobenzene-8020		107	% Recovery	JPM	5/03/96

Sample Desc.: Hoffer-Trip Blank		Collection Time: 9:40		Analyst	Analysis Date
Sample Date: 5/01/96	Method	Results	Units		
Test Performed					
Aromatic Volatile Organics	EPA 8020	BPQL	ug/L	JPM	5/03/96
Methyl Tertiary Butyl Ether	EPA 8020	BPQL	ug/L	JPM	5/03/96
Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Toluene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Ethyl Benzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Total Xylenes	EPA 8020	BPQL	ug/L	JPM	5/03/96
Chlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,2-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,3-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
1,4-Dichlorobenzene	EPA 8020	BPQL	ug/L	JPM	5/03/96
Surrogate: 8020		107	% Recovery	JPM	5/03/96
***Bromofluorobenzene-8020					

BPQL = Below Practical Quantitation Limit; 1 ug/L

c: Hoffer & Associates

Authorized by: Garick Lemoine